

REMARKS

Reconsideration and allowance are respectfully requested in light of the above amendments and the following remarks.

Claims 1-7 have been amended for clarity and have not been narrowed, and no estoppel should be deemed to attach to these amendments.

A new Abstract is submitted herewith as required by the Office Action.

The drawings have been objected to for failing "to show how the input Known Signal, P_i , is received by the residual phase error detection section." The "known signal" is a signal known and provided to, or generated by, both the transmitting apparatus and the receiving apparatus. If a communication apparatus includes both a transmitting apparatus and a receiving apparatus, for example, a known signal generated by the communication apparatus may be commonly provided to both the transmitting and receiving apparatuses. Alternatively, the transmitting and receiving apparatuses may each generate the known signal or have a separate known signal provided to them.

The Office Action appears to recognize that one of ordinary skill in the art would know how to generate this signal for the transmitting apparatus, since no objection has been made in this regard. Therefore, it follows that one of ordinary skill in the

art would know how to generate this signal for the receiving apparatus. Applicant reminds the Office that the known signal and the received version of the known signal are distinct things. The received version of the known signal is a signal communicated through a propagating environment that may be received in a distorted form due to the conditions of propagation. The known signal, Pi, generated for, or by, the receiving apparatus is an undistorted version of the known signal. Accordingly, withdrawal of the objection to the drawings is warranted.

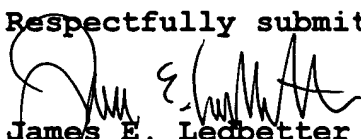
Claims 1-4, 6, and 7 stand rejected, under 35 USC §103(a), as being unpatentable over Miya (US 6,175,558). Claim 5 stands rejected, under 35 USC §103(a), as being unpatentable over Miya in view of Sunaga (6,381,233). Applicant respectfully traverses these rejections.

Miya is assigned of record to the present Assignee, Matsushita Electric Industrial Co., Ltd. and has been applied under 35 USC 102(e). The present claimed invention and the subject matter of Miya were commonly owned at the time the present invention was made. Accordingly, under 35 USC 103(c) Miya does not qualify as prior art against the present claimed invention. Therefore, allowance of claims 1-7 is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

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JEL/DWW/att

Respectfully submitted,

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--ABSTRACT OF THE DISCLOSURE

A² An OFDM-CDMA transmission apparatus may include a first spreader that carries out spreading processing on a plurality of transmission signals using different spreading codes, respectively. A second spreader carries out spreading processing on at least one known signal using a spreading code different from the spreading codes employed by the first spreader. A frequency division multiplexer breaks down the transmission signals spread by the first spreader and the known signal spread by the second spreader into individual chips and subjects these chips to frequency division multiplexing, thereby assigning one chip data signal string per subcarrier. The frequency division multiplexer operates such that information from each of the plurality of transmission signals and the known signal is multiplexed into every chip assigned to a different subcarrier. After the chips are assigned to the subcarriers, they are transmitted by a transmitter.--
